

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Nebraska Aluminum Casting Inc.

Nebraska Manufacturing Extension Partnership

Nebraska Aluminum Castings, Inc. is on a Firm Foundation with Lean Manufacturing

Client Profile:

Nebraska Aluminum Castings, Inc. (NAC), founded in 1975, produces custom aluminum die-castings, machined to customers' specifications. NAC services a wide range of original equipment manufacturers whose requirements for finished aluminum die-castings fall into the medium and short run production range. The company's customer base is in the agriculture, automotive, construction, transportation, recreation and petroleum industries. NAC employs 60 people at its facility in Hastings, Nebraska.

Situation:

NAC recognized that in order to maintain its market position, processes needed to be evaluated and improved. The company had committed to a recent opportunity to provide additional, new and existing castings as machined and finished, ready for assembly. The proposed expansion in terms of facilities, equipment and manpower would be a significant benefit to NAC and the local economy. The many challenges associated with such an undertaking made it imperative for the company to prepare employees in techniques that would empower them to achieve extraordinary results. NAC had heard about the benefits of using Lean Manufacturing techniques to improve processes. The Nebraska Manufacturing Extension Partnership (NMEP), a NIST MEP network affiliate, had made contact regarding the opportunity to provide regional training on Lean Manufacturing.

Solution:

NMEP introduced Lean techniques and identification of wastes to several company employees. NMEP also provided on-site Lean Manufacturing training in the Principles of Lean Manufacturing and 5S (Sort, Set in Order, Shine, Standardize, Sustain). NAC arranged on-site Lean training to 20 additional employees. The on-site training was designed for all employees to begin to work together to resolve issues and establish guidelines to improve workplace organization, improve quality as well as increase throughput while reducing the amount of work-in-process. Training was also aimed at improving group dynamics and communication skills as well as initiating a Lean environment within NAC's facility. With NMEP's assistance, NAC was able to define a plan to eliminate process wastes. During the 5S Workplace Organization training, a team of employees focused on improving the organization of the tool room. In systematically assessing the tool room, the team determined the need for color coding and organizing Eye Bolts as an area of improvement.

Results:

- * Reduced labor costs by \$41,000.
- * Reduced time in locating materials by 30 minutes per shift.

Testimonial:

www.mep.nist.gov



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"Nebraska Aluminum Casting's process of integrating the understanding of the Lean Manufacturing techniques with those of our business needs continues to present challenges. We feel strongly the assistance provided by the Nebraska MEP team has greatly increased not only our understanding of the procedures to be employed, but also the need to embrace the Lean Manufacturing techniques as a means to a more secure future for our company. I am confident the Nebraska MEP team provides just such an important opportunity to our manufacturing base in Nebraska. I have and will continue to support as well as recommend the Nebraska MEP approach to others in manufacturing."

Dick Freeling, Sr. Project Mfr./Lead Facilitator